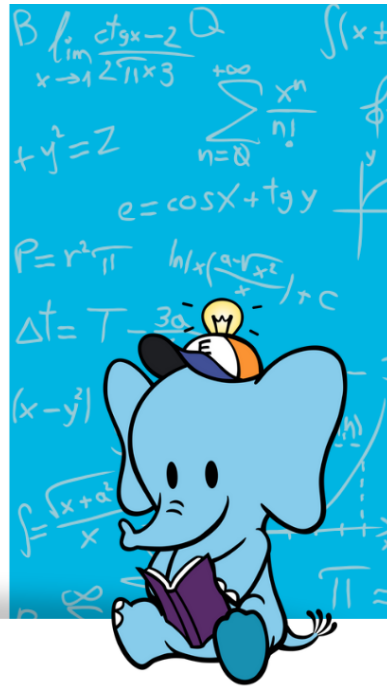


HOW SUCCESSFUL CHILDREN LEARN

Vincent Pang

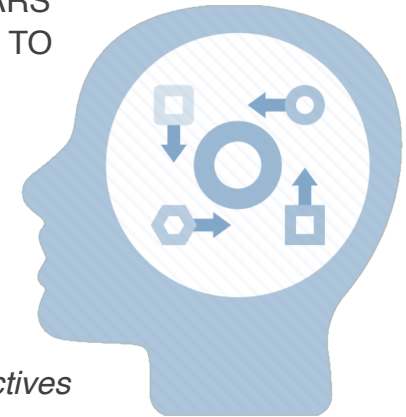
Master in Education Nanyang Technological University, Singapore
Former Master-Teacher, Ministry of Singapore



1

CONSTRUCTING KNOWLEDGE

LEARNERS FROM 6 to 12 YEARS OLD ARE COGNITIVELY ABLE TO LEARN **THROUGH** :

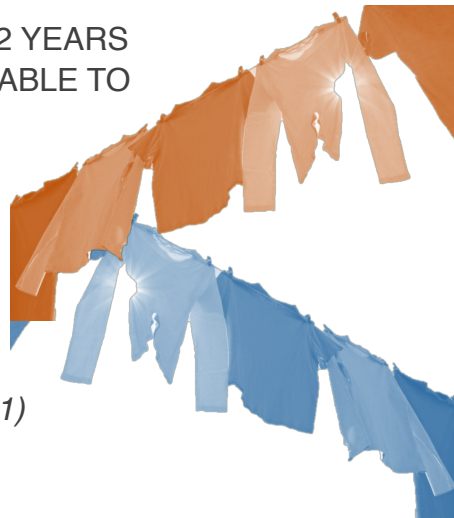


- *Logical Reasoning*
- *Social Interaction*
- *Empathy And Multiple Perspectives*



CONSTRUCTING KNOWLEDGE

LEARNERS FROM 6 to 12 YEARS OLD ARE COGNITIVELY ABLE TO LEARN **WHEN**:



- *Inputs Are Familiar*
- *Pegged & Stretched (i + 1)*
- *Interacting Socially*



3

CONSTRUCTING KNOWLEDGE

LEARNERS FROM 6 to 12 YEARS OLD ARE COGNITIVELY ABLE TO LEARN **BEST**:



- *In a Social Situation;*
- *Through Interaction;*
- *Subconsciously & Naturally.*



4

ACQUIRING SKILLS

IQ pedagogy & methodology: a unique approach to teaching and learning, synthesising activity-based learning with purposeful multi-sensory input at learners' level



COGNITIVE-BASED
STREAMING



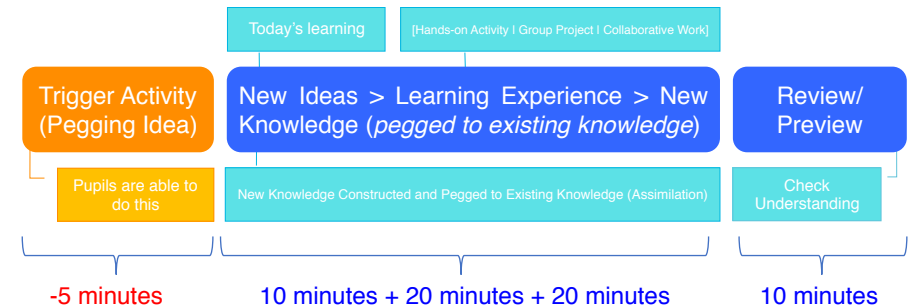
ACTIVITY-BASED
LEARNING (ABL)



MULTI-SENSORY
INPUT

$$B \int_{\lim} \frac{ctgx-2}{1+x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e^{\cos x + tgy} \quad y = \sin x \quad t=2$$

A TYPICAL LESSON



$$B \int_{\lim} \frac{ctgx-2}{1+x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e^{\cos x + tgy} \quad y = \sin x \quad t=2$$

HANDS-ON EXPERIENCE

Activity NOT Worksheets

- Even for language skills:
 - For example: What is a plot?
 - Let's try!

Scaffolding assignments

- Blooms Taxonomy
 - Assess with LOTS
 - Knowledge
 - Recall
 - Stretch with HOTS
 - Application
 - Synthesise
 - Create



$$B \int_{\lim} \frac{ctgx-2}{1+x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e^{\cos x + tgy} \quad y = \sin x \quad t=2$$

HANDS-ON EXPERIENCE

Activity NOT Worksheets

- The critical difference
 - Collaborative
 - Multi-sensory;
 - Hands-on;
 - Learner-centred

Try this with your shoulder partner:

I am thinking of *a number*. I *divide it by 2* and *subtract 6* from quotient. Then I take the *square root of the difference* and *add 1* to it. Lastly, I took the *square root the sum* and the final result was *3*. What is *the original number*?



$$B \int_{\lim} \frac{ctgx-2}{1+x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e^{\cos x + tgy} \quad y = \sin x \quad t=2$$

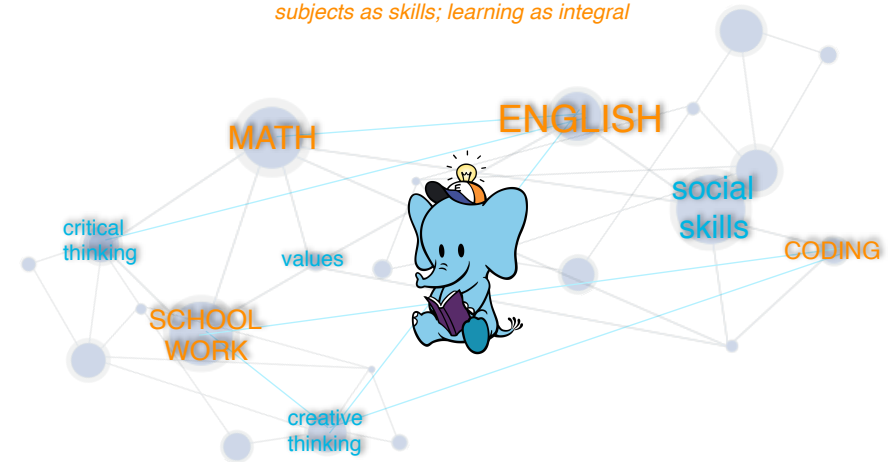
Chapter 7: Work Backward

For problems that involve series of events, you know the end and are asked to determine the situation in the beginning. You can use working backward to reverse the actions until you get to the beginning condition.

HOLISTIC APPROACH

BECAUSE EVERYTHING IS RELATED

subjects as skills; learning as integral



$$B \int_{\lim} \frac{ctgx-2}{x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e = \cos x + tgy \quad y = \sin x \quad t=2$$

$$B \int_{\lim} \frac{ctgx-2}{x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e = \cos x + tgy \quad y = \sin x \quad t=2$$

PREPARING LEARNING ASSESSING

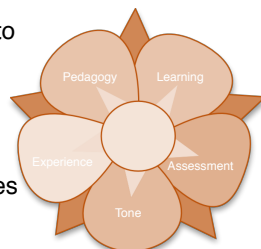
PETALS a student-centred approach to teaching and assessing learning

Pedagogy:

considers pupil readiness to learn and their learning styles

Experience of Learning:

stretches thinking, promotes inter-connectedness and develops independent learning



Tone of Environment:

safe, stimulating and which engenders trust

Learning Content:

considers pupil readiness to learn and their learning styles

Assessment:

- information on how well pupils have performed
- timely feedback to improve learning

$$B \int_{\lim} \frac{ctgx-2}{x^2} dx \quad \int (x \pm a)^c \quad e=2.79 \quad A-C = e = \cos x + tgy \quad y = \sin x \quad t=2$$

THANK YOU!

